Abstract of the Disclosure

Disclosed concepts include a method of optimizing an illumination profile of a pattern to be formed in a surface of a substrate. Illumination is optimized by defining a transmission cross coefficient ("TCC") function determined in accordance with an illumination pupil and a projection pupil corresponding to an illuminator, representing at least one resolvable feature of a mask to be printed on the substrate by at least one impulse function, and creating an interference map of a predetermined order based on the at least one impulse function and the TCC function, wherein the interference map represents the at least one resolvable feature to be printed on the substrate and areas of destructive interference.